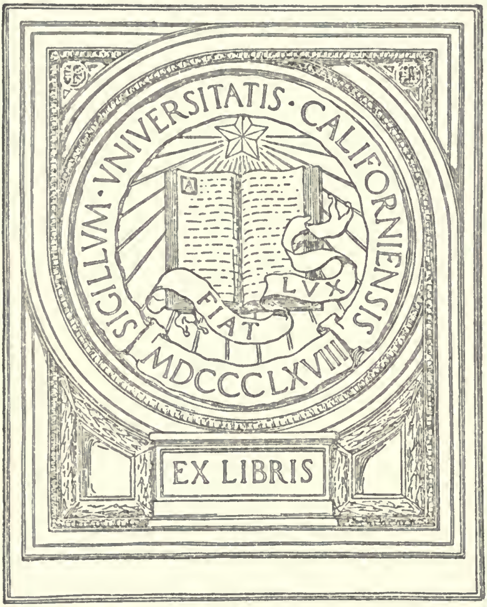
LD
3295
1852

UC-NRLF
$B 74 909

YC 65236



SIGILLVM · VNIVERSITATIS · CALIFORNIENSIS
FIAT LVX
MDCCCLXVIII
EX LIBRIS

A

DISCOURSE,

DELIVERED BY

HENRY P. TAPPAN, D. D.

At Ann Arbor, Mich,, on the occasion of his

INAUGURATION AS CHANCELLOR

OF THE

UNIVERSITY OF MICHIGAN,

DECEMBER 21st, 1852.

UNIV. OF
CALIFORNIA

DETROIT:
ADVERTISER POWER PRESSES.
1852

LD3295
1852

A DISCOURSE.

Gentlemen of the Board of Regents:

You have appointed me to a station of dignity and responsibility. I acknowledge the trust you have reposed in me: I am sensible of the distinction you have conferred. It is the more honorable to both parties, in that, on my part, it was unsought for; and on your part, was a free and deliberate determination.

We have come together to-day to recognise each other in our new relation. You have publicly sealed my appointment, and inducted me into office as the Chancellor of the University of Michigan; and I acknowledge you as that "Body Corporate" which, having "the general supervision of the University," must henceforth, while I retain this office, exercise over me, likewise, the supervision designed by the Constitution of the State.

The career of the Young State of Michigan has, thus far, been remarkable and distinguished. Nature had done much for this region: Almost surrounded by mighty lakes, and in fact a peninsula, and even leaping beyond its northern waters to the shores of Superior to embrace the fields of copper and the mountains of iron; diversified with inland lakes, and rolling prairies, and park-like groves of oak with

> "Flowers which not nice art
> In beds and curious knots, but Nature boon
> Poured forth profuse on hill and dale and plain;"

endowed with a soil of exhaustless fertility, and adapted to the growth of grains and esculent plants, and the choicest

M223898

fruits; and with transparent and genial skies above—did it not seem a region inviting man to prosperity and greatness, to high thoughts and noble deeds?

In a quarter of a century, it presents us an intelligent and thriving population counted by hundreds of thousands—the stock of New England and New York mingled with some of the best emigrants from the Old world; through large districts of country are found farms and dwellings which appear more like the heritage of centuries than the improvements of the recent settler; on the banks of that broad and beautiful river through which the clear waters of the upper lakes pour into Erie to feed the sounding cataract of Niagara, an old French Village has grown up to a Commercial Emporium, and is hastening on to a splendid Metropolis; substantial railroads in every direction have obliterated the trail of the ancient Son of the Forest, and lead the astonished traveller through villages, towns and cities, which have sprung up by the magic of that industry whose divine mission it is to change the wilderness into fruitful fields, and build the habitations of happy families where was once the lair of the savage and of beasts of prey.

We who have just come to this State, meet every day with the old settlers who are not yet old men; and we can hardly believe their stories of the wilderness—of log-huts, and stern toils, and the hunter's life—told amid scenes where cultivation reigns, and where Taste with rosy fingers has scattered so many embellishments.

But the State of Michigan has not advanced in material prosperity only. A mere material growth is not the noblest growth of society. Productive farms, substantial dwellings, merchandise, manufactures, steamboats, villages and cities—marking industrial activity and increase of wealth, stand directly connected with the outward sensuous life of man, and may only indicate a population well fed and clothed and warmed—a population enriched with utilities and comforts, fattened only to die; like the golden fruits of autumn most full and luscious when on the verge of decay.

There is a higher law of our being which commands us to thought, duty, and immortality. The very stretch of our material prosperity shows this higher law in the skill, fore-cast, and energy which are implied—shews what capacities we possess, and reminds us of the possibilities of nobler gifts and of diviner destinies. We can think; but, beyond mere utility, there are science, taste, art, patriotism, morality, religion to be thought out. We can improve and create; but, there is an intellectual and spiritual nature to be improved, as well as industrial skill; and there are works of beauty, and institutions of learning and religion to be created, as well as steamboats, railroads, trade and manufactures. The human being may not expend himself upon the outward prosperities of the world which he inhabits; he has a higher and more important work to do for his own nature. His, is not a life of work and play intermingled; but, a life of work and self education intermingled: not a life of success and enjoyment, and then to end life and just to die; but a life of discipline, of growing wise and good, and of diffusing wisdom and goodness, and in dying still to live in institutions that go on from generation to generation to exert a power to make men wise and good—and still to live in the grateful and pleasant memories of those who in the past recal the fathers of the present, and find in the burning and shining light of an imperishable example the guide of duty, and the stimulus of hope.

Institutions of learning have been founded both by individuals and the State. The Universities of Oxford and Cambridge, and the University of Paris were the work of individual munificence and enterprise in their inception, and in much of their after development. So, also, most of the Colleges of our country have been created by individuals. The State lent its aid when these institutions had already attained conspicuity, and given demonstrations of their value and importance. Prussia and Michigan are examples of States creating Educational Systems. The first has been completely successful, and the institutions of Prussia, like ancient learning and art, stand before us as models which we are constrained to admire, to approve and to copy. The institutions of Michigan are yet in their infancy, but we think there is the promise of a bright career, of a full and ripe development, which cannot well disappoint us.

But Prussia is indebted to the old systems which individuals had established, as the foundation of the modern developments; and as producing that general intellectual tone and taste which prepared the present generation to enter with spirit into the work, and affording those lights of experience which have guided to the grand and successful result. Michigan also, must forever stand indebted to the individuals who early conceived the plan of her educational system, and by their wisdom and energy brought about the public endowments of her institutions of learning. It will be the labor of individuals too, to mature this plan, and to apply these endowments to their legitimate purpose. This educational system in that great work without which endowments prove vain—the founding of institutions on right principles and their efficient management—will require men of rare gifts of intellect, of patriotism, and philanthropy. But State endowments will not always supersede the necessity of private munificence: at least, they will not debar it of its privilege. In the former ages, individuals began what the State afterwards adopted and nourished. Nor, after the State had afforded its patronage were the streams of private munificence dried up, as the history of the English Universities proves. In our age, where the State begins the work, private munificence may be admitted, if not invited to aid it. In a State institution, why should not any individual, or several individuals, jointly, for example, who feel disposed to do so, endow a professorship, or found a library, under regulations adopted by the institution for that purpose?

In our country where property changes hands so rapidly, and where the most solidly built estates must finally go to heirs we know not whom, and be melted again into the multitudinous channels of trade, how important that we, the men of to-day, who hold the wealth and the power, should, while our day lasts, build obelisks and pyramids which shall stand when all things else have been swept away! We cannot entail estates in our country to our legal heirs. But an estate might be entailed in a great University as long as our country shall exist—a splendid beneficence—a monument worthy of the ambition of any man, or of any number of men who would lay the foundation and the corner stones thereof. And even in countries where estates can be entailed, how many fair baronies and earldoms have perished in the wrecks of time, while the endowments of Eton and Winchester, of Oxford and Cambridge, of the Bodleian library remain, handing down the names of their founders to a grateful posterity, quickening ever the intellectual, moral and social life of England, nurturing great men, fostering universal knowledge, enriching the fields of literature, and making the name of England glorious to the end of time!

In a commercial community, commercial modes of thinking will prevail more or less even in undertakings which are not intrinsically of a commercial character. It is well, therefore, to look at the establishment of institutions of learning in a commercial point of view, also. Literature, Science, Arts, educational apparatus, and labor, all increase the commodities of trade, and add to national wealth. What a vast amount of capital is enlisted in the book trade and in newspapers! Think of the manufacture of paper and types, of cloth and leather for binding, of gold leaf and other ornaments; think of the multitude of laborers employed in printing establishments, binderies, and publishing houses. All this is set agoing by the thoughts of solitary men—by men whom literary institutions, directly, or indirectly, furnish with ideas, and permeate with the spirit of authorship. Every new book is a new commodity of trade. There is so much added not merely to entertainment and culture, but also to the stock of industry, and the sources of wealth. Suppose that all the books which have been made by men who have been trained directly by Universities, or who have lived in countries where they have shed their light, were at once removed from trade, would it not be like the destruction of the cotton, or sugar, or tobacco, or tea and coffee trade? And a good book is an everlasting commodity: Homer, Milton, Shakspeare, Byron, Scott, Euclid, Bacon, Bunyan, and all like these—have they not given to trade commodities which can never perish? Are not Webster's dictionary and spelling book durable commodities? Who can calculate the industry which has been employed, the wealth that has been, and is still to be created by the publication of even one of these books? The same remarks are plainly applicable to painting, sculpture, music and all those arts which adorn human life: they create valuable stocks in trade, and furnish all those embellishments which are deemed essential in the manufacture of useful fabrics.

Without astronomy there would be no navigation across oceans, and hence no distant commerce. Without mechanicians and engineers, there would be no steam engines and railroads. Without chemistry, there would be no improvements in agriculture and manufactures.

In demanding the highest institutions of learning, therefore, we demand that, which by giving the highest advantages to literary and scientific pursuits, brings into being, most abundantly, books, fine arts, mechanical inventions, and improvements in the useful arts; thus creating not only, important and indispensable commodities in trade, but providing also, the very springs of all industry and trade, of all civilization and human improvement, of all national wealth power and greatness.

A people aiming at large increase of wealth by agriculture, manufactures, and commerce, of all others should aim to found and foster the noblest institutions of learning. On their own principles they should do so. They of all others require men of science.

A great University, too, in any place, by its direct expenditures, by the numbers which it brings together, by the industry which it calls into action in its necessary going on, is an important element of commercial prosperity, besides all the collateral and consequential commercial benefits which we have above shown to be so vast and vital. The city of Edinburgh is a city of one hundred and fifty thousand inhabitants. Its University is the foundation of all its prosperity. Take that away, and it would sink into comparative insignificance. New Haven in our own country affords another illustration of the same kind.

But all these considerations are to be named, only, to meet every kind of objection, and to demonstrate how every form of good must attend upon institutions which some would appreciate only in these lower points of view. There can be no doubt of the truth of the principle, that to pursue those ends which are demanded by the highest and holiest part of our being, will involve our best interests in every relation in which we are placed; a principle announced by the Divine Teacher when he said, "Seek first the kingdom of God and his righteousness, and all these things will be added unto you," and so that what conduces most to the intellectual and moral culture of society, will likewise make wealth and prosperity to abound. But, nevertheless, in arguing a great cause we shall choose to place it upon that empyreal height of reason, truth and duty, which is its native dwelling place. And thus we say to individuals, and to the State, let us create the highest and best institutions of learning at whatever cost, that those who would learn, and those who would advance human knowledge, may want nothing that can aid them. Let us stand up before the world with our good and great things, as well as with our useful and prosperous things. Let us make men as well as houses and railroads. Let us have eternal thoughts circulating among us as well as gold and silver.

But, although, I am speaking these truths in the young State of Michigan, I feel that I am not speaking them in a region where they are strange and marvellous. Am I not speaking the sentiments of your own statesmen and legislators—of the men who framed your Constitution, who laid the foundations of your social fabric? Has not education watched over the cradle of this State? Are not the principles I have uttered the very principles which are engrafted in its Constitution?

A very able and interesting Digest has been made of the "System of Public Instruction and Primary School Law of Michigan" by the Hon. Francis W. Shearman, the Superintendent of Public Instruction. I have read this volume with extreme pleasure and satisfaction. I have collected from it much valuable information. It justifies me in what I have said, that Michigan has not advanced in merely material prosperity. It shews in a young people an intelligent appreciation of education, a devotion, an energy in promoting its interests which would do honor to older states, and which many older states have not exhibited. In the acts of your legislature, in the messages of your governors, in the reports of your superintendents, regents, and boards of visitors, I find embodied enlightened sentiments, wise suggestions; and a general system wrought out which aims to unite the interests of the lowest schools with the highest institutions, and to provide for the youth of the State every form and degree of education which their circumstances and pursuits may demand, or to which their tastes may incline them. It is a system which would connect by regular gradations the common school with the University; and provide for the first elements of thought, and for its ripest development. And is not education in its very nature a unity? He that studies the calculus, must begin with the multiplication table: he that writes an epic poem must begin with the alphabet. And so, likewise, he who begins with the multiplication table should be furnished with the means and opportunities of reaching the calculus, if he thirst after a higher knowledge: and he who begins with the alphabet should find the way prepared before him so that he may become an epic poet if his genius so determine him. The educational system fitted to a free people, and fitted to them, because, based upon the rights of humanity itself, is one that shall open opportunities of education of every grade to those who wish to avail themselves of them.

Common school education should be perfected, because, as essential to a free people as air and light to creatures that must breathe and see. And since the perfection of common school education must depend upon the qualifications of the schoolmaster, Normal schools, and whatever may serve to raise up able and efficient teachers become a prime necessity. But in Michigan common school education has been nobly provided for. In the very ordinance by which it was admitted into the Union, lands in every township were granted for the use of schools. By the primary school law of 1837 the basis of a free school system was laid. And the new constitution has ordained that "the Legislature shall, within five years from its adoption, provide for, and establish a system of primary schools whereby a school shall be kept without charge for tuition, at least three months in each year, in every school district in the State; and all instruction in said school shall be conducted in the English language. A school shall be maintained in each school district at least three months in each year. Any school district neglecting to maintain such schools, shall be deprived for the ensuing year of its proportion of the income of the primary school fund, and of all fuuds arising from taxes for the support of schools."

The Constitution has created also a Board of education for the general supervision of the State Normal School.

The lands appropriated for education are declared inviolable, and are sacred to that object alone. Here then is the Charter of popular education in Michigan—a Charter framed in the spirit of those words so solemnly uttered by Governor Mason in 1837: "In contemplating the past and dwelling on the future, we are forcibly reminded that if our government is to outlive the term heretofore allotted to republics, it is to be accomplished by the diffusion of knowledge among the people, and that we must depend upon the power of a liberal and enlightened public 'as the Palladium of a free government—the Ægis of our federal existence.' Let us not suppose that we are beyond the calamities which have befallen other nations.—Guard the education of the rising generation. Teach them in earliest lessons of life, the great principle upon which their government was founded, and keep before their minds those scenes of American glory which have chiefly contributed to immortalize the American name."

In the same message Governor Mason remarks: "In the organization of your primary schools, which are the foundation upon which your whole system of education must be based, the first measure essential to their success and good government, is the APPOINTMENT OF GOOD TEACHERS, of the highest character both moral and intellectual. Liberal salaries should be allowed the instructors, and without this, you may rest assured, yon must fail in your object; as individuals in all respects competent to take the charge of your schools will be excluded from them by the parsimoniousness of their compensation."

The soundness of these remarks no one can question.—Indeed the State has acted upon them in the establishment of a Normal School. The compensation of teachers will always present a difficulty in our country where the opportunities of more profitable employment in professional and business life will draw away young men, even if the compensation should be very much advanced. Our best class of teachers in all our States have hitherto been young men preparing for college, or actually connected with college as undergraduates, or employing some time, after graduation in teaching. And these will always continue to be a very important resource to our primary schools ; thus furnishing another striking fact to prove the unity of interest between the lower and higher institutions. Normal Schools will at least increase the number of educated individuals, and thus cannot but prove a public benefit. They must also add to the number of competent teachers. Every effort should be made to bring about this their legitimate end. They should be strictly held to this, and not be diverted to other objects. The education of competent teachers is an object grand enough, and important enough to demand a distinct organization, and a peculiar training.—In order to meet to some extent the difficulty above mentioned, it would be both expedient and just to institute a rule that all persons entering the Normal School should obligate themselves to teach in the primary schools a certain term of years.

Michigan has her primary and Normal Schools, but she has not confined herself to these. She has advanced to the conception of a great University as the culmination of her educational system. By an act of Congress approved May 20th, 1826, the Secretary of the Treasury was authorised to set apart and reserve from sale a quantity of land not exceeding two entire townships—46,086 acres, for the use and support of a University within the then territory of Michigan, *and for no other use or purpose whatever.* This may be term the fundamental law upon which the present University is based.

The income to arise from the fund thus created was, at an early day, estimated at from fifty to seventy thousand dollars. The University designed to be established upon this liberal endowment was conceived of as no limited and imperfect institution. Governor Mason in his message of 1836 speaks of it as destined to be "among the wealthiest institutions of the country, and, under a proper direction, an ornament and honor to the West." Mr. Whipple, now the Chief Justice of this State, from the committee on education during the same year, speaks of it as a subject of the gravest moment and connected with "the universal diffusion of knowledge." The Rev. J. D. Pierce, the first Superintendent of public instruction, in reporting a system of public instruction, in 1837, recommends the organization of the University by creating a Board of Regents with power to appoint a Chancellor and professors. He suggests three departments of instruction: of Literature Science and the Arts, of Law and of Medicine; the first to comprise fifteen professorships; the second, five;

and the third, six professorships. "The first law under State legislation establishing this institution was approved March 18th, 1837. Its manner and style was to be "THE UNIVERSITY OF MICHIGAN;" its object defined to be "to provide the inhabitants of the State with the means of acquiring a thorough knowledge of the various branches of Literature ,Science and the Arts." Under this law there were to be established thirteen professorships in the department of Science, Literature, and the Arts, three in the department of Law, and six in the department of Medicine.

In 1838 Governor Mason recommends that the entire fund be appropriated to the establishment of one great University, and that portions of the Salt Spring lands be set apart for the support of the branches. The same year the opinions of distinguished individuals in the Union were solicited in respect to the establishment of one great institution in preference to several Colleges, when such men as Everett, Wayland and McIlvaine, recommended unequivocally the establishment of one great institution.

In 1840, the Superintendent again urges the importance of "a full and thorough course in the University," on the ground that nothing short of this can satisfy the demands of the public, and the general expectation of its numerous friends."—During the legislative session of the same year a committee was appointed to enquire into the condition of the University. In their very able report the committee represent the system adopted by the State as contemplating only one University capable of fixing the standard of education. In speaking of the establishment of Branches we are forcibly reminded of the German system of gymnasia as introductory to a University course. The subject is not fully developed, but that this grand idea permeated the minds of these intelligent gentlemen there can be no doubt. "The multiplication of colleges beyond what is needed," say the committee, "multiplies the expense of education to the State, and in the same proportion, diminishes the value of the instruction. The University of

Oxford had, at one time, ten thousand Students. If these had been distributed in seperate Colleges, containig two hundred each, with its separate faculty, libraries, apparatus, building &c., and if these were to be as perfect in all its parts, the expense would have increased beyond all calculation: but no one of them could be as perfect as the University." The report closes with the following remarks; "What the legislature should attempt in reference to the University, is, in the opinion of the committee, to put the whole subject into the hands of competent men, leaving it with undivided responsibility on their shoulders, and the legislature not to meddle with it again, except, to protect as guardians, not to destroy as despots. Repeated legislative interference, known by experience to be the ruin of a cause like this, would soon dishearten every Regent who takes an interest or active part in the duties of his office. The duties of the Regents in their turn will be mostly to provide the means and apparatus, and the like, and fill the several faculties with able men, *and throw the individual responsibility of carrying out the work of education on them.* The further duties of the Regents are only to watch and defend, and not to interfere with the growth of what they have planted. A Board of experienced Regents can manage the funds and machinery of a University better than any Legislature; and the faculty can manage the business of education—the interior of a college, better than any Regent."

I might proceed in this way to collect from the Digest of Mr Shearman, the sentiments of the ablest and best men of this State respecting the University, to an almost indefinite extent. I might add many suggestions respecting the tasteful cultivation of the University grounds, the increase of the library, the provision of philosophical apparatus and the instruments of an Observatory, and the establishment of an Agricultural and Scientific School for Agriculturists, Mechanics and Manufacturers. But this is enough to show that the founders and friends of this University had large ideas and noble plans which will not only justify me in entertaining and advancing an exalted conception of this institution, but which will not suffer me to do less. The shades of the dead as well as the voices of the living would cry out shame upon me who stand before you as the first Chancellor of this University, if I did not comprehend that it was intended to be an institution of the highest rank, and, as every University should do, cover the whole field of Literature, Science and the Arts.

A University is the highest possible form of an institution of learning. Whatever schools exist, less than this must be incomplete without it. It embraces when fully developed, as its very name indicates, all possible means for studying every branch of knowledge, and thus perfecting education; and all possible means for making new investigations, and thus advancing knowledge.

It is evident, at once, that every nation ought to possess such institutions. Does not every nation require for its independent civilization, for its intellectual power and glory, for the purposes alike of its culture, its arts, and its commerce, to possess within itself the means of gaining all knowledge, and the means of advancing all knowledge?

Again it is evident that to no nation under heaven can such institutions be more important than to the United States. We have made ourselves well nigh independent of other nations in all the forms of productive industry; Must we still remain dependent upon the scholars and artists of other nations? We have reached a high political and commercial developement; do we notneed a corresponding intellectual, artistic, and social developement to attain the moral forces, the refined graces, and the healthful balance of society? Nay can we truly be called a nation, if we cannot possess within ourselves the sources of a literary, scientific, and artistic life as well as of a political and commercial?

To form a proper idea of what is contemplated in the organization of a University, it is necessary to take into view the range of human knowledge itself. Let us, briefly, represent this:

All knowledge must be a knowledge of every thing standing around men, and objective to him, or, a knowledge of man himself—the being that knows.

I. A knowledge of that which is objective to man. Here is, first of all, pure space conceived of as void of entity.—Then in this pure space we draw lines, and conceive of and represent relations, and thus create an absolute and pure science—the science of Geometry. And as we who are active in this do, necessarily, become conscious of succession—the succession of our own thoughts, so this succession in the speculative activity of our minds, becomes the condition ot another pure science—of Analysis related to time as Geometry is to space.

Next, we look at that which occupies time and space. And here we have, in the first place, the great planetary masses which compose the universe, viewed, merely, as to form, magnitude, gravity, and motion.

These masses being defined in space and having their motion measured in time, the pure sciences of space and time are applied to determine their laws: and thus we arrive at Astronomy.

There is but one of these masses that we are immediately connected with—our own earth. When we come to examine it, we find it, generally to consist of solid, fluid, and—the atmosphere being a part of it—aeriform substances. These determined under conceptions of gravity, motion, and force, constitute General Physics.

The light, by which we see all things, moving in straight lines is reduced to a distinct and peculiar science; and Optics become an illuminated Geometry.

We next proceed to examine the solid earth more particularly; and finding it to consist of distinct substances having remarkable differences, we classify them, and construct the science of Mineralogy.

Then we look at the crust of the earth, generally, and we find it broken up, and thrown into a great variety of positions forming hill, mountain, and valley: and here observing that the different minerals are presented in aggregate masses, and arranged in a certain order of stratification, indicating successive and mighty revolutions, we are led to the science of Geology.

But, the substances around us are continually undergoing changes which appear to be connected with heat, moisture, air, and light. We cannot forbear to pry into these changes, especially, as they are connected with our own sustenance, health, and comfort. In making these investigations. we experiment upon the combinations of substances ; and step by step, we find out laws of composition and decomposition, until, earth, air, and water are resolved into their simple elements : and now we have the science of Chemistry.

But, in carrying on investigation and experiment, we become acquainted with new forces in nature: we are no longer confined to the centripetal and centrifugal forces—we have also, Galvanism, Electricity, Magnetism, and Elasticity or Expansion.

We have not yet done with the substances around us. They are presented to us, not merely as aggregations of like substances, or as compositions of unlike, they are presented, also, under the law of that mysterious force which we call Life. Our investigations into the phenomena of life lead us to the general science of Biology. Under this we have Animal and Vegetable Physiology, branching out again into Zoology and Botany. The fossil remains of the earth connect Biology with Geology. The historic indications of Geology connect it with Astronomy.

In forming our acquaintance with nature, we have become conscious of two commanding ideas—Utility and Beauty. The world is useful: the world is beautiful. But the knowledge we have gained by experience enables us, under the light of these ideas, to conceive of other forms of utility and beauty besides those which are presented in the rude uncultivated nature around us. Then comes the application of our skill and industry. The forests are leveled; the fields are cultivated; human habitations are built; a wonderful variety of fabrics are produced for comfort and elegance; vessels cover the rivers, lakes and oceans; roads, bridges, canals, railroads, form artificial avenues of communication across continents. We now have Agriculture, Manufactures, Mechanical Arts and Commerce; and Wealth as their combined result—all growing out of our knowledges. The activity of human thought—scientific cultivation has done it all.

Again, the idea of beauty, in the presence of the beautiful in nature, leads to conceptions of proportion of harmony, symmetry and grace; and man becomes the Artist of the beautiful in Architecture, Gardening, Sculpture, Painting, Poetry and Music. Scientific knowledge and Mechanical skill united with the idea and taste of beauty, throw over human society the charms of a purer and more elevated existence.

II. Let us now turn to man himself—the being who knows. Of all that is going on in his own mind, man is conscious. There is a world of phenomena within him, as well as without him. All men are, more or less, observant of these phenomena, just as they are more or less observant of the phenomena without. But, as only studied and methodical observation, without, leads to physical science; so, also, only studied and methodical observation, within, leads to metaphysical science, or philosophy. It is by this profound reflection that pure philosophy, comprehending Ontology, Psychology, Aesthetics, Logic, and Morals, is developed. And philosophy throws its light over all human thought, and activity, unfolding the principles of law and government, determining the methods of reasoning and investigation, defining the scope of the understanding, and settling all ultimate principles.

But with this study of man within—of man the universal, must be joined the study of all that man has done on the great theatre of the world, appearing in nations and individuals. Hence arises History under its multifarious divisions, embracing all human action, all human progress.

With this, there is, necessarily connected the study of languages, literature, art, antiquities, law, religion, ethnology and geography.

Now when we speak of a University, we speak of an institution that shall make adequate provision for all this. And there is required for the constitution of such an institution:

1. A sufficient number of men qualified to teach all this; and to carry on original thought and investigation in all this: First of all, we must have the skillful laborers.

2. Books, apparatus, specimens, and models sufficient to furnish all needed information, all needed facilities for scientific and learned investigation, and all needed illustrations. And the men who are to do the work, can alone determine what and how much are needed.

3. Are buildings required? Buildings of course are required. But in our country we have ever begun at the wrong end. We have erected vast dormitories for the night's sleep, instead of creating libraries and labratories for the day's work. We have erected ornamental buildings, and expending our means and enthusiasm, there, we have failed in the men, the books, the apparatus, the specimens, the models. We have had gorgeous shells that seemed like mother of pearl, but there were no pearls within. It were better, like Abelard, to lead our students into the desert, if we could there give them truth and arouse thought.

The Girard College looks like the abode of Apollo and the Muses; but it is only the hospital of some three hundred boys who are instructed in elementary learning, in part if not for the most part, by young women.

All we have to say about buildings, is that we should have only what is necessary, and of a plain, neat, appropriate, and substantial kind.

The instructors or teachers in this circle of human knowledge we divide into Faculties. 1. The Faculty of Philosophy and Science. 2. The Faculty of Literature and the Arts. In the German Universities, these are both embraced under one Faculty—the Faculty of Philosophy. We have here, all branches of knowledge taught, without applying them to any professions, and without those modifications which they receive in this application. Next, we have the Faculty of Theology, or philosophy and science appplied to religion and morals—to the great questions of human duty: the Faculty of Law, or philosophy and science applied to jurisprudence and government: and the Faculty of Medicine, or philosophy and science applied to the investigation and cure of diseases. Then in addition to these, there is required a school for the Fine Arts; a school for Agriculturists, Mechanics, Manufacturers, and indeed for every branch of human industry—a school for the Industrial Arts; and a school of Pedagogy, for teaching the philosophy and art of teaching. The school of Fine Arts in Paris, has twenty professors; and the school of the Industrial Arts, fourteen professors.

The titles, Master, Professor, and Doctor meant, originally, the same thing, namely, a Teacher. A Master was a full graduate, and all full graduates were originally under obligations to teach if called upon. A Bachelor was an imperfect or incipient graduate who was obliged to begin to teach, in the way of serving an apprenticeship at it. This apprenticeship continued during three years in connection with hard study; and then he became a Master or Doctor—that is a full-fledged Teacher. In like manner Doctors of Theology, Law and Medicine, were Teachers of those sciences. These titles, therefore, were not designed to be mere honorary titles—mere flattering and unmeaning names: they implied an office, and the discharge of important duties.

A University thus, in its nature and provisions, the highest possible school of learning is, evidently, a school where study may be pursued indefinitely. It may be pursed in reference to particular branches and for a limited time, or it may be pursued for a life time. It may be pursued for a Bachelor's or a Master's degree in one or more faculties, or it may be pursued in particular reference to the Fine or to the Industrial Arts. Whatever a student may need or desire is here to be found. Such is the comprehensive idea of a University.

But the question now arises, at what age, or with what preparation should a student enter a University?

In the first place, there will be a common judgment that a University ought not to embrace the rudiments of knowledge. These can be gained more easily and less expensively in primary schools scattered over the land, and can be united with that domestic influence which is so important to the early education itself. Besides, there are very many who will never look beyond this rudimentary training. And of what avail could the learned professors and preparations of a University be to juvenile students?

But after this primary education is completed, may not the pupil then enter the University? Before we could well answer this, we should have to determine the limits of the primary course. How many studies shall it embrace? Through how many years shall it extend? But the common judgment of mankind seems to have settled this point also. A primary education for the many should embrace whatever is necessary for all men in the general transactions and offices of life; while those who aim at University discipline should make an especial preparation for it. Thus arises the intermediate school. Hence, in all countries where there are primary schools and Universities, there are intermediate schools also.

But now a point remains to be decided between the intermediate school and the University which really comprises our first question: where shall the intermediate or preparatory school close its course; and where shall the University begin?

Now if we look through the leading colleges of our land we shall find that they require about the same amount of preparation for admission; in other words, that they have prescribed about the same limits to the preparatory course. Then again, they have all adopted about the same curriculum of studies, to be pursued during the collegiate years; and they have all adopted four years as the collegiate term, distributing the students into four classes corresponding to these years, naming them Freshman, Sophomore, Junior and Senior. And yet it must be acknowledged that all this does not amount to a University, as we have above described it. Does any College, or University, so called, in our country contain the professors delivering lectures on all branches of human knowledge, and the requisite libraries, and material of learning in general? Is there one of them where a student can study what he pleases, to any extent he pleases, and find every help ready to his hand?

And whence comes this confessedly limited and imperfect course of four years, beginning at a certain point and ending at a certain point; and these four classes with their peculiar titles; and the Baccalaureate degree which winds up the whole; and then the Master's degree, in course, after three years, without requiring any residence, any study, or any examination? We find it all existing among us: but where does it come from? Let me tell you, we have borrowed it from the English Universities: we have borrowed it without enquiring into its fitness: we have simply obeyed an established authority.

If the English Universities were perfect institutions, if they were really Universities, we could not object to their authority. But Sir William Hamilton, the distinguished professor of Logic in the University of Edinburgh, has shewn conclusively in his able articles in the Edinburgh Review, and recently published with his philosophical essays in a separate volume. that the English Universities have deteriorated by departing from their original foundation.

Originally Masters or Professors—full graduates bred up at the Universities, delivered lectures on the different branches of science and literature as then developed. To accommodate the students, Halls and Inns—establishments for lodging and board—were created and placed under the supervision of proper officers. Then benevolent individuals created and endowed colleges for theological students. Afterwards secular colleges were created in like manner. Those placed upon the endowment received education board and lodging gratis. In the course of time others were admitted into the colleges by paying the charges. Each college was placed under its Head or President. Then Fellowships were endowed in the colleges yielding an annual stipend upon which scholars could be maintained during life, if they remained unmarried. The education of those admitted into the colleges came, in time, to be conducted by the fellows and tutors belonging to the same. The Halls and Inns were given up, or changed into colleges. The result was that the functions of the University professors ceased. The entire educational discipline fell into the hands of the fellows and tutors of the colleges; and the sole function of the University was to confer degrees. In these colleges the four years course was established for the attainment of the Bachelor's degree; and the Masters being no longer acting Professors, that title became merely honorary, and was conferred upon non-residents, in course, without enforcing the ancient requirements.

This state of things, existed when the first American colleges were established. It was natural that they should copy from the mother country. All subsequent colleges, have followed the same example.

Some peculiarities however, characterise the American colleges. They have professors as will as tutors, and they confer degrees, so that they possess some of the features of a University. They have been, in our days, compelled to advance still further towards this position. This has resulted from the great advancement of the sciences. The four year course was based upon the state of the sciences in former centuries. In modern times it is found wholly inadequate.—We have, indeed, endeavored to keep pace with advancing science by pressing more into the four years; but we have thus, only rendered scholarship more superficial. At length dissatisfied with this we have begun to institute additional courses. Our two oldest colleges have set us the example. Harvard College has established the "Lawrence Scientific School, and attached to it the degree of Bachelor in Science. Yale College has established a "Department of Philosophy and the Arts," intended for graduates of this and other colleges, and for such other young men as are desirous of pursuing special branches of study," making the proviso, however, that "all students in philology and mathematical science shall be thoroughly grounded in those studies," in order to be admitted. The University of Vriginia, and Brown University have thrown aside the four classes with their titles, and establishing courses in the different branches of learning usually pursued at College, admit students at their option, requiring, however the usual attainments for a degree. Other colleges are also endeavoring to modifiy and enlarge their courses.

In all this there is more or less improvement attempted, and a commendable struggle to advance. But in all this there is not yet University amplitude, ripeness and freedom.

It is demonstrable that a system of public education can not only never be complete, but that it can never work with unjarring, noiseless wheels, in the due co-ordination of its parts, without a fully developed University at the lead of the movement. This alone can set the standard of education and define the boundaries of the primary and the intermediate schools; this alone can afford the requisite stimulus to educational efforts, by showing every student the place where all his wants and aspirations can be met; as a beating heart sending its currents of life through the whole, and maintaining the perfection of the organism by visiting the minutest parts.

The manner in which a University determines the limits of other institutions is seen at once when we consider its relation to education historically as will as philosophically considered. "Education, in general, is of two kinds, and of two kinds only: an education imposed by tutors and governors: and an education self-imposed. The first relates to that period of our being embracing childhood and youth, when the faculties are yet immature, and knowledge is in its elementary stages.—The second relates to that period commencing with early manhood, when the faculties are comparatively ripened, when elementary knowledge has been attained, and actual experience has taken the place of imagination and conjecture.

The first period requires of necessity authoritative direction, and plastic superintendence. The second period is competent, unless the first has been neglected and suffered to run to waste, to form plans, make decisions, exercise choice, and to apply itself, as from itself, to self-culture, the formation of character, and the duties of life.

"All men do, in some sort, attain to both kinds of education: for all men are disciplined in some degree, well or ill, by a controlling power in early life; and all men have some sense of independence and new responsibilities, when they reach the age of manhood. Education, of both kinds, is a law of our being more or less perfectly developed.

"The idea of Educational Institutions, embraces the reduction of educational means and influences to method and system.

"For the first period, various institutions have sprung up, from the most elementary schools to the gymnasia or colleges. For the second period, there is only one institution—the University.

"According to the present condition of our educational system, the higher, self-determined, and manly course of study belonging to this period, is wanting, or appears only as an imperfect appendage to the college under the form of certain voluntary studies, and a limited range of lectures on the loftier sciences, conducted under manifest embarrassments arising from the want of a suitable preparation on the part of the student, and the inadequate amount of time covered by the collegiate course: or, where in a few instances carried beyond the point of graduation, still wanting in the ample preparations and stimulus of a University. Hence, where the higher culture is gained, it is gained, rather by studies pursued by the individual amid the duties and cares of life, after the institutions of learning have been departed from, than by means of the institutions themselves. The culture which men, who are determined to make the most of life, attain to amid its active pursuits, is invaluable, and will be prized no less by those who have studied at the University than by those who have not. But who does not see the value, nay, the necessity of an Institution which opens its doors to us just when we escape from governors and tutors, and provides us with all the means, and affords us the example and fellowship of manly self-discipline? It is here alone that we can properly pursue the study of philosophy, which implies more than mere acquisition, and is the self-conscious growth of thought. It is here that we can become disciplined to independent scientific investigation, or lay broad and deep the foundations of professional and political life. It is here, also, that teachers and professors can be prepared for the scientific and classical departments, of our educational institutions in general.

"The University thus stands just where the first period of education closes, and where the other begins. The second period, indeed, never closes. But, as education during the first period, requires, for its orderly developement, institutions of learning; so, education, during the second, requires for its proper determination and successful prosecution, the formation of habits of independent thought and study, an acquaintance with method, and a general survey of the field of knowledge, such as can be gained only in an institution especially founded and furnished for these high ends. The University receives the *Alumnus* of the *Alma Mater*, and ripens him into the man prepared for the offices of the Church and the State, and for the service of Science and Letters."*

The intermediate school, by whatever name we call it, embraces the period of a student's apprenticeship, wherein he learns how to study and how to use his books, which are his tools. But in the University he begins his manhood, and uses his tools as one who has gained his trade.

---

* University Education, pp. 82-85.

The Primary School, the Intermediate School, and the University, now stand before us clearly defined; and these three constitute the educational system founded alike upon philosophy and experience. The Primary has connected with it, as its necessary adjunct, the Normal School. The Intermediate has connected with it, special schools for the arts of industry, where the University is not contemplated. And the University crowns the whole.

Would I bring before you the most perfect exemplification of this system, I should refer to Prussia. Prussia occupies a portion of the earth's surface two fifths larger than the State of Michigan, but by no means equal to it in soil and natural resources generally. It has fifteen millions of inhabitants. For these, are provided seven Universities. In 1835 the number of gymnasia or intermediate schools was one hundred and twenty-four, containing about twenty five thousand scholars ; and the number of Primary Schools about twenty two thousand, in which two millions of children of both sexes were receiving an education. The largest University is that of Berlin, in which, in 1850, were one hundred and sixty five Professors and teachers, and eighteen hundred and fifty students. Of the students, one hundred and eighty four were matriculated in theology, five hundred and seventy in law, and two hundred and twenty three in medicine, and three hundred and twenty-five in philosophy, or general science and literature. Besides these, five hundred and fifty-seven not matriculated, were pursuing studies in special departments.

The primary schools have for their scope intellectual, moral and physical developement. They embrace the following branches: 1.—Religion and morality, established on the positive truths of Christianity; 2.—The German language; 3.—The elements of Geometry and general principles of drawing; 4.—Calculation and applied Arithmetic; 5.—The elements of physics, of general history, and of the history of Prussia; 6.—

Singing; 7.—Writing;] 8.—Gymnastic exercises; 9.—The more simple manual labours, and some instruction in the relative country occupations.

The Burgher School is a higher form of the primary, established in the towns, and affords a more advanced education.

The Seminaries for Primary Instructors, or normal schools embrace the following branches: 1.—Biblical history, the study of the Bible, and Christian doctrine and morals; 2.—The German language in its etymology, grammar, and use in speaking and composition; 3.—Mathematics; 4.—History; 5.—Geography and geology; 6.—Natural history and physics; 7.—Music in theory and practice; 8.—Drawing; 9.—Penmanship; 10.—Pedagogy or the art of education, conjoined with practice; 11.—Elements of horticulture; 12.—Gymnastics.

Pedagogy is a department of Literature which in Germany is cultivated to an extent almost equal to any other. In 1830, there were published five hundred and one works of this class; in 1831, four hundred and fifty-two were published; and in 1832, five hundred and twenty six were published. Of these, twenty were journals supported by subscribers.

The course of study in the Gymnasium may be represented by that of our Academy and College combined.

The Primary School embraces a wider range of studies than our Primary School. The Student remains in the Gymnasium until he has completed his eighteenth year. He can then enter the University, provided he is prepared to undergo the examination. It not unfrequently happens that two or three years longer are required.

In the University, the course in Theology is usually completed in three years; the course in Law, in two years; and the course in Medicine in four years. The course in Philosophy or general Science and Literature is extended at the pleasure of the Student.

A Student pursuing any one of these courses may avail himself of the others according to his ability and inclination.

Such is a very brief outline of the Prussian system. Its completeness and thoroughness are evident to every one. The eduation of man, whether we consider his capabilities, the duties which he is called to perform, or his ultimate destinies, is a mighty affair, and therefore demands a mighty provision. It is the highest work of society.

Now, in persuing the work to which I have already referred—"The system of public Instruction and Primary School Law of Michigan"—I was delighted to find the following statement by the Honorable Superintendent of Public Instruction:—"The SYSTEM OF PUBLIC INSTRUCTION which was intended to be established by the framers of the constitution, the conception of the office, its province, its powers and duties were derived from Prussia. That system consisted of three degrees. Primary instruction corresponding to our district schools; secondary instruction, communicated in schools call Gymnasia; and the highest instruction, communicated in Universities. The superintendence of this entire system, which was formed in 1819, was entrusted to a Minister of State, called the Minister of Public Instruction, and embraced every thing which belonged to the moral and intellectual advancement of the people. The system of Michigan was intended to embrace all institutions which had for their object the instruction of youth, comprising the education of the primary, the intermediate class of schools, however denominated, and the University."

And the first Superintendent, Mr. Pierce, in speaking of the Primary School system of this State refers also to the Prussian system as the model.

I have not, therefore, been travelling out of the record in giving an exposition of the Prussian system as a just and adequate exemplification of what is meant by a System of Public Instruction. I have indeed taken high ground as to education, but I have done no violence to public sentiment. I have only been reiterating and expounding the thoughts and words of the men who laid the foundations of the educational system of Michigan, of the men who have been, and are now, its acknowledged supporters.

One half of the work is done when we have laid down a principle, and adopted a model. How can we vacillate now? How can we be looking about for expedients? Our way lies right before us.

There are three grades of schools existing in other parts of the Union. But mark the difference between the Prussian model which we have adopted, and the English which has hitherto been generally adopted in our country. In the first place, the English model contains no common School System. Happily, we have all departed from it, in this respect. Secondly, the English intermediate school and the college are institutions precisely of the same nature. The Schools of Harrow, Rugby, Eton and Winchester, are schools of the same general course of instruction and discipline with the Colleges at Oxford and Cambridge. The latter carry on, in a similar way, what was begun in the former, and confer a degree.

They cover only the first period of Education—that under tutors and governors. The second period—that of manly self-discipline with the aid of the lectures of eminent University professors is not reached in the English system. Oxford and Cambridge contain no schools of Theology, Law, Medicine, and Philosophy.

Now following this system, what are our Academies but incipient Colleges and what are our Colleges but more mature Academies with the power of conferring degrees? And do not young men, often, remain in the Academy until the Sophomore, Junior, and even Senior year? We, too, in our institutions have covered only the first period of education, and left the second period, or, the University proper undeveloped,

There is another respect, too, in which we have followed the English; We have laid out immense sums of money in providing dormitories for Students. Dr. Wayland estimates that of a million and a half invested in New England Colleges, twelve hundred thousand dollars have been expended in brick and mortar. In creating Colleges, we have uniformly begun with two things—the erection of dormitories, and a commencement Exhibition: As if sleeping in cloisters, reciting poems and orations in public, and the conferring of degrees, were essential to the Educational System. Public speaking has its advantages, and to confer degrees, where they are merited, may not be amiss; but why not let young men provide their own board and lodging? Our Colleges are not located in the wilderness, but in pleasant towns where accommodations are abundant.

Now, all this is opposed to the Prussian model. In Prussia, the great aim is to provide libraries, museums, labratories, observatories, and philosophical apparatus, and a sufficient number of eminent professors. In Prussia, they take care of the great things, and let the small things take care of themselves.

Michigan has the credit of proclaiming the Prussian model. She has wisely adopted the most perfect standard as her standard. Let us see how far she has, already, conformed to it.

First, in relation to Primary Schools. And here we can say that the Common School system in Michigan, like that of New York and New England and other states of the Union, does honor to our country. Sir William Hamilton, in his able review of Cousin's "Report upon the state of Public Instruction in Germany, and in Prussia particularly," has remarked that "the system of popular instruction in some of the North American democracies, however inferior, still approaches nearest to that established in the Autocratic Monarchies of the Empire." It is a system admirably organized, and one which places the means and opportunities of education within the reach of every individual in the state. The inferiority spoken of refers, chiefly, to the teachers employed, and the scope of the education afforded. But, who does not see that this scope admits of being enlarged, at the same time that more competent and efficient teachers are raised up, and that improvement in both respects, is continually advancing? The Union Schools of Michigan are a higher and improved form of the Primary Schools. Here, by combining the resources of several districts, more accomplished teachers, and a more extended and thorough instruction are alike secured. These schools will not only afford to pupils generally, a knowledge of the practical sciences, I mean those more immediately connected with the daily occupations of the mass of the community, but they will become, also, scientific and classical schools preparatory to the collegiate department of the University itself.

The Normal School is one of the very highest importance. It will not only add to the number of well educated individuals; but, notwithstanding all the disadvantages under which we labor, and which have been already noticed, it will tend, in an eminent degree, to raise up those well instructed and disciplined teachers upon whom depends the success of the Primary and Union Schools. I think it cannot be doubted that a classical as well as a scientific department should be carefully cherished in this school, that here the seeds of every form of education may be plentifully sown. I rejoice to see in the law establishing this school a clause which imposes the duty of giving instruction in "the Mechanic Arts, and in the Arts of Husbandry, and Agricultural Chemistry, in the fundamental Laws of the United States,and in what regards the rights and duties of citizens," as well as, "in the art of teaching, and all the branches that pertain to a good common school education." Teachers thus prepared will be qualified to impart in our primary schools important information on subjects connected with the occupations of the most numerous classes of the community, and to exert an influence to form in the very bud the fine and manly proportions of American citizenship. The preparations which have been made to carry this institution into effect, are on a large and liberal scale, and worthy of the intelligent and enterprising population in the midst of whom it is located.

We proceed now to enquire into the condition of the Intermediate Schools. Of these, as commonly defined, there are none, scarcely, now in existence but the Union School and the Normal School. These, indeed, we regard as important intermediate schools of a certain grade answering, in some respects to those institutions which in our country have received the designation of "Academies."

An effort was made to establish what were called "Branches of the University," coeval with the University itself. These have been closed and the distribution of University funds in that direction entirely discontinued. Public sentiment has thus pronounced a decision against them. Every one came to see that institutions located at different points, with limited preparations, and admitting pupils of both sexes, were only High Schools, and could not possibly be branches of a University; while the distribution of University funds to sustain them, only operated to prevent the creation of a University in reality. It was as if in building the Capitol of the United States, instead of collecting the materials in one place to lay the blocks of marble into spacious walls, to erect the Corinthian columns, and to rear the lofty overarching dome, we had scattered them throughout the Union in the vain idea of building a portion of the Capitol in every State.

Neither a University or a College was ever thus created—with branches scattered abroad. The conception does not belong to the history or to the nature of these institutions. A branch of a University or of a College would have to repeat the same professorships, the same courses of instruction, the same museums, libraries, and apparatus: that is, it would be nothing less than another University, another College.—The only Universities which bear a semblance of branches are the English, which are, indeed, a collection of colleges but of colleges in one place. But, here, as we have seen, the

University, in reality, has been discontinued, while the Colleges occupy the entire field. Were the University proper to be revived, then the Colleges might, perhaps, be called its branches, but more properly its roots, or its preparatory dependencies. The German Gymnasia are not branches of the Universities, but only preparatory institutions. If they were all collected around the Universities, then would each University with its dependent Gymnasia be what Oxford and Cambridge would be, if the University lectures were restored.

Properly speaking, the branches of a University are its faculties of Theology, Law, Medicine, and Philosophy.

While the "Branches" of the University of Michigan, as they were constituted, were destined, unavoidably to expire, we must do them justice by acknowledging that the idea of a proper institution was connected with them, and that they foreshadowed a future system. Recollect, that the Prussian system was the model which this young State dared to adopt.—In carrying out this system, it laid down, boldly the two extremes—the two poles—as we may call them—the Primary Schools, and the University; and then it sought to represent the intermediary—the Gymnasia, by these scattered "Branches." The aim, therefore, was wise and praiseworthy, the attempt was honorable, while the failure was induced by the very circumstances which threw the material into the wrong mould. The "Branches" could not become Gymnasia, unless, on the one hand, the course in the Primary Schools were enlarged and made to correspond to the Primary Schools of Prussia; and, on the other hand, the University were truly unfolded and made to correspond to the Prussian Universities. All the parts of this system are necessary to each other, and go to sustain each other: So that, if we could compel the University into existence, it would call forth the Gymnasia, and the Gymnasia would call forth the Primary Schools. Or, if we could begin by giving the Primary Schools all the perfection of the Prussian, they would demand the Gymnasia, and the Gymnasia would demand the University. The first movement would be produced by the quickening power of a lofty standard of education permeating society in every direction: the second movement would be the natural result of the taste of a true system of education in the lower degrees, where the human mind realising its capacity of development would claim the higher degrees also. It is only ignorance and empiricism that can resign themselves to repose; the one, from imbecility, the other, from conceit.

And now we come, last of all, to enquire into the condition of the University. The first question which here arises is, whether the University as far as developed conforms to the English, or to the Prussian model? Like most of the similar institutions of our country, it is of a mixed character. In many things, like them, it conforms to the English model. In the Literary and Scientific course, like the English colleges, it has adopted the term of four years, with four classes named like theirs, and closing with a Commencement* celebration, and the conferring of the degree of Bachelor of Arts. But, on the other hand, in common again with several institutions in the United States, it has recognized several Faculties each connected with a distinct department. In this respect, in common with them, it departs from the English model; for, at Oxford and Cambridge we do not find one college devoted to literature, science and the arts, another to theology, another to law, and another to medicine; but, we find, only, a congeries of colleges, each being a classical and scientific school. In our distinct departments and faculties, therefore, we have followed the Prussian model. But do we closely conform to the Prussian model? No, we do not. Wherein do we differ from it? Let me tell you. And now I speak in reference to all the institutions of the land which have constituted distinct departments and faculties, in reference to Harvard and Yale, for example, as well as in reference to the University of Michigan.

---

*Incipere—to commence—was the term used to indicate that the Bachelor or imperfect graduate begun his public duties as a teacher.

First; in the Department of Literature, Science and the Arts, called, also, the Academic, and the Undergraduate Department, the course universally adopted corresponds not at all to that of the Prussian Universities; but, whether we consider the age of admission, the studies pursued, the method of instruction, and the term of study, is very similar to that of the Prussian Gymnasia. Thus in our so called Universities we have, often, only the Gymnastic course, and omit the higher and proper University course, altogether.

Secondly; in institutions which, like Yale and Harvard, introduce a course distinct from the Undergraduate, and which take some aspects of a proper University course, attendance upon the undergraduate course is not insisted upon as a prerequisite. In Prussia, on the contrary, a course of at least four years at the Gymnasium is necessary for an introduction into the University.

Thirdly; in respect to the three departments of Theology, Law, and Medicine, the usage, in our country, is to require the undergraduate course or an equivalent thereto, for the first, but not for the two last; while in Prussia, Theology, Law, and Medicine, alike, require the previous course of the Gymnasium.

You perceive, therefore, that the Prussian system is philosophic in its principles, consistent and proportionate in its parts, and thorough in its methods and discipline: while ours is mixed and vacillating, and consequently imperfect.

You will naturally, ask me, at this point, what I would propose for the improvement of our system?

The answer is attended with difficulties. I would answer neither rashly, nor dogmatically, nor in general and indefinite terms. I would give an honest, candid, and fearless answer, and according to my best judgment, holding myself ready to be corrected. We have a common interest at stake. There are no other motives that should influence us than the most enlightened, patriotic, and humane. In this free country, let every man speak his mind freely, and with a true heart.

For some time past, I have been urging in connection with others the establishment of a University in the city of New York—that city which has been my home during most of my public life. I have said, here in this Metropolitan city we have the wealth, and all the appliances at hand. Let us take advantage of the libraries already existing among us. Let us enlarge them still more. Let us collect here all the material of literature, science, and the arts. Let us endow professorships, and induct into them the most eminent scholars we can find, and give them free scope to lecture on all the branches of human knowledge. We shall thus have, at least, one place in our country where students may resort to study to their hearts content, and render it no longer necessary for them to seek foreign Universities. "That will be a proud day," I have said, "for the city of New York, when it shall see such an Institution rise in the midst of its marts of business, and its splendid palaces, and giving to its prosperity the crown of intellectual glory. Why should we leave to another generation a work which we ourselves can accomplish, and which shall carry down our influence to the future under a form so good and beautiful, and so worthy of all that we claim for our enterprise, our far-seeing wisdom, our devotion to our country's welfare, and our confident hopes of its ultimate destiny?"* And now, by an unexpected allotment of Divine Providence, I find myself here in this distant region—the region of the mighty Lakes—a region where a quarter of a century ago the wilderness still brooded, but where now I am surrounded by an intelligent and thriving population, before whom the wilderness has disappeared, and who have already consecrated a spot—fit to become an Academian Grove—to letters science and art, and laid the foundations of a University—I find myself here, agitating the great question of educational reform and progress. It is a question, Citizens of Michigan! in which no one can doubt your interest; and when, having called me to this honorable and responsible position, you ask me, what I have to propose? You have a right to a candid and explicit answer.

---

*University Education, p. 100.

I propose then, generally, that you follow out the principles you have adopted, and perfect, manfully, your system of education according to these principles. Dare to be in advance of the whole country, if need be. And this is the way in which I would carry out these principles:

First, let the Primary Schools be enlarged and perfected in their discipline and courses of study, according to the Prussian model. This will most effectually be done by means of the Union and Normal Schools. The union of districts will enable you to concentrate your resources for employing better teachers, and introducing higher branches of study. You will observe that in Prussia the Primary Schools carry forward the pupil until he is prepared for the Gymnasium. In our Union Schools, as in the Burgher Department of the Prussian Schools, we may introduce the study of the classics; and thus we shall want no other preparatory schools for either the classical or scientific departments of our colleges, taking them as equivalent to the Gymnasia. The multiplication of Union Schools appears to me, therefore, essential to our system.

The Normal School is connected immediately with the interests of the whole Primary School System, as our great resource for competent teachers.

Now, when we come to consider particularly the University, we find there existing as yet in the Department of Science, Literature, and the Arts, only, the College or Gymnasium. According to the practice of our country, we have connected our Gymnasium with our University, and placed it under the same faculty. Our organization is a University organization, by departments and faculties. Our course of instruction, also, is carried on by Masters of Arts or Professors in full, and not by mere Baccalaureate tutors and fellows, as in the English Colleges. But before the University course proper could be developed, it was necessary that the Professors should give instruction in the Gymnastic course.

No exception can be taken to this: University Professors may instruct in a Gymnasium, if they please: They are called, imperatively, to do so while, as yet, University students do not present themselves, and Gymnasia alone exist. And thus we might have many Gymnasia under the shadow of the University, ordered by University Professors. This, indeed, would be in accordance with old usage, since, in Paris, for example, instruction in the Colleges was given by University Professors, at the very time, that in England the University and its Professors were laid aside for the Colleges and their tutors.

Most of the higher institutions of our country are organised in some respect as Universities; but there are some of them which as yet have not only created but one faculty, but continue, also, from year to year to confine their instructions in this faculty to the Gymnastic or Collegiate course. Sometimes a struggle is made to advance beyond this by occasional lectures. But as these lectures are given to the undergraduates, the University does not in this make its appearance.

In the Literary and Scientific department of the University of Michigan, we find ourselves, at the present moment, in just this condition: We are a University Faculty giving instruction in a College or Gymnasium.

Now, our first object will be to perfect this Gymnasium. To this end, we propose to establish a Scientific course parallel to the classical course. In this scientific course a more extended study of the Mathematics will be substituted for the Greek and Latin. There will be comprised in it, besides other branches, Civil Engineering, Astronomy with the use of an Observatory, and the application of Chemistry and other Sciences to Agriculture and the industrial arts, generally. The entire course will run through four years, in which the Students will be distributed into four classes similarly to the classical course: and in both courses, instead of the old names of *Freshman*, *Sophomore*, *Junior*, and *Senior* borrowed from the English colleges, we will take the designations employed in the institutions of the Continent of Europe, of *First*, *Second*, *Third*, and *Fourth*.

Students who pursue the full Scientific course, and pass the regular Examinations, we shall graduate as *Bachelors of Science*—borrowing a title here from the French Colleges, as the Lawrence Scientific School of Harvard, and the University of Rochester have done before us—in distinction from the *Bachelors of Arts* in the Classical course.

But, in addition to this, we shall allow Students to select special courses, and give them, at their departure, certificates of their proficiency. The school of civil Engineering, and the school of Agriculture and Mechanics will belong to these special courses.

We shall thus make our College or Gymnasium an Institution where the youth of our State can freely enter to prepare themselves for professional study, for the higher pursuits of Science and Literature, or for the pursuits of business life.

By establishing the scientific course in distinction from the classical, we do not intend to do any discredit to classical learning, or to imply ought in opposition to those who advocate its surpassing value and importance to general and finished Scholarship. On the contrary, we fully accord with the sentiments so well expressed by a member of the late board of Regents* respecting the Greek and Latin languages; "Objections," says he, "against their study are generally founded in ignorance of their use and design, or the true reasons which have determined the instructors of youth for centuries in giving them such a conspicuous position. It is not the amount of information obtained from classic sources, which commends them so much for the study of youth, as it is the admirable aid the Latin and Greek languages furnish for the discipline of the mind, the development of its powers, and the formation of habits of close, thorough and accurate discrimination, for the cultivation of a refined taste, and for securing a better, more accurate, and thorough knowledge of our English tongue."

---

* Dr. Pitcher's Memoir. See "System of Public Instruction," p. 320.

In my view the Latin and Greek can no more be banished from a system of education than History, Rhetoric, Poetry and Philosophy. When a language becomes cultivated and enriched in the use of a civilized and enlightened people, it receives the seal of immortality. It may become a dead language, in the sense of being no longer a spoken language, but it can never become dead to human thought. It is embalmed in the literature which it hands down from generation to generation. As well might the Past itself perish, as the language through which we receive its deeds and thoughts. Were the English ever to become a dead language, in the sense of being no longer a spoken language, would not the history of England and America, the philosophy of Bacon, the Sciences born with Newton, the poetry of Milton and Shakspeare, command all after generations to study it?

There is no question about the value of the Classics. That is not a point of debate with us. We are only arranging a system of education to meet the wants of students of every degree. Suffer every man to choose for himself: and help every man to the kind and measure of learning which belongs to his actual pursuits. From the barely useful, he may, after a time, go to the ideal and beautiful. But if he abide by the barely useful, let him be well educated for that.

Nor by a distinct scientific course do we mean to lend authority to a vague opposition of a practical to a scholastic education. Human life embraces a great many particulars, and everything which goes to make it up must necessarily belong to it. Now, thinking belongs to it as well as talking; sleeping and dreaming, as well as waking and walking; the fragrance of flowers, the song of the birds, and the sight of the heavens, as well as eating beef and drinking ale; poetry and philosophy and eloquence, as well as ploughing, sowing and reaping; the building of temples, as well as the building of log cabins; the making of statues, pictures and all beautiful things, as well as the making of chairs and tables, spades and hoes and all useful things; there is going to church, as well as going to mill; there are holidays, as well as everydays.

And this human life shews a great many kinds of people—of different colors, ages, sizes, and conditions: and all these kinds of people are about their different things. Now it is the order of creation and providence that this variety should exist. We must take the world just as full as it is. If every one were permitted, according to his fancy or prejudice, to destroy around him to make room for himself alone—what would be left of human life? The distinction between a scholastic and practical education is like all this. Both kinds of education are good and answer somebody's purpose. In truth, a scholastic education is altogether practical to him who desires and wants it. And a practical education becomes quite scholastic to him who does not desire and want it. A farmer may find Chemistry very closely connected with his calling, but what can he do with Latin and Greek and the higher mathematics? But he who is about to make a dictionary or write a history may find Latin and Greek very practical knowledge; and he who is seeking after another planet in the heavens, will tell you that the calculus is the most practical thing he can find. And do not dictionaries, histories, and astronomy belong to human life, too?

The true principle of life for every individual, is, not to quarrel with life in the rest of the world. If thy business is to cut down trees, then go thy way and cut down trees: thou art feeding cheerful household fires, and laying open future harvest fields. If thy business is to sail in a balloon, then go thy way and sail in a balloon; thou art making a needful holiday for the laboring multitude, and trying thy barometer in the heavens. The one has the wide-forest for his place, and the other the wider space above. The one may look up, and the other look down, and be pleasant objects to each other. Be ever charitable to each other ye brothers of the human kind! The sky and the earth are still wider apart, and yet they may not be the one without the other.

There is one thing, at least, which the wood-cutter, and the æronaut have in common; and which the one cannot spare more than the other, although in some sort, the one is under it, and the other above it; and that is the air on which they both live. The one would be altogether too low down, and the other altogether too high up, if they were to get beyond the boundaries of it.

And so likewise heaven and earth. and all worlds have one thing in common and that is the pure element of light; and every particle of matter yields to the gravitating power.

Now, there are the lower schools for the education of human souls: why are they called the lower, but, that there are others which are higher than they? and if there are the higher, there must also be the highest. But since we must have the lowest for earliest years of life, and the higher for the more developed years of youth, who shall forbid us the highest for the discipline of manhood? And, then, as there are different years and conditions to be educated, and different callings to be fitted for, so there are a vast variety of knowledges to be gained. There is a knowledge of the stars of heaven, as well as of the stones of the earth; a knowledge of men, as well as of beasts, birds, fishes and insects; a knowledge of organised matter in plants and animals, as well as of crude matter in the crust of the earth; a knowledge of languages and music, as well as of winds and tides; a knowledge of pure science, as well as of mixed science; a knowledge of invisible forces, as well as of visible motions; a knowledge of the past as well as of the present; a knowledge of mind, as well as of matter; a knowledge of law and duty, as well as of disease and medicine; a knowledge of the divine, as well as of the human. What shall we do with all these knowledges? Destroy some of them, or set them aside? Nay, they are all in God's universe, and cannot be quenched any more than the stars in heaven; and the mind of man is made for them all, and as if by a divine inspiration, will be busy with them all; and all that is good and beautiful in the world flows out from them.

There are a few minds which have a sort of universal knowledge: there are others which to a general and imperfect comprehension of science, add the ripe knowledge of a few things, or it may be of only one. Some have grasped a great deal of knowledge; others very little. But all these knowledges are scattered somewhere through human minds, exerting their influence for the common good; like the wide streaming light of heaven, which crowning the high mountains with glory, visits also the humblest flowers in the valleys below.

We have described a University as a place where all these knowledges are to be found—a shop of the nine Muses, where they sell their wares to the children of men. Is not that land destitute in which such a place can nowhere be lighted upon? Without such a place, we must want many branches of knowledge, or seek them in other lands. Instead of making our own scholars, and our own books, we must import them, or be without scholars and books.

Suppose all the Universities of Germany were destroyed, where then should we look for their great men whom the world honors, whom we honor—their Schleiermacher, their Neander, their Grimm, their Ritter, their Ehrenberg, their Savigny, their Humboldt? And would not their whole glorious system of education fade away? What would England be without her Universities? And what would America be without her Colleges? The poets, the philosophers, the historians, the wits of England and America where would they be?

Blot out the University of Michigan, young as it is, and would it not seem as if the ancient forests were again overshadowing the land?

This young University, shall we not carry it forward to perfection? Is not the ambition worthy of a free and independent people which would make it one of the great Universities of the world, where all knowledges are to be found, where great and good men are to be reared up, and whence shall go forth the light and law of universal education?

But to make this such an institution, what do we need? We need first of all to provide the full material of learning: our library must be enlarged so as to furnish all the helps of learning which are to be found in books: we need an observatory and a complete philosophical apparatus: our collections in natural history need to be extended; and collections in the fine arts to be begun and carried to a point to furnish the necessary illustrations for aesthetical lectures, and the necessary models for artistic works. Then we want men, ripe scholars to fill the required professorships, and to carry on the courses of lectures in the several departments.

In fine, we want all the material, and the professors to enable those who have passed through our college and gymnasium, or through similar institutions in our land, to enter upon and pursue professional studies or general literary and scientific studies.

The population of Prussia is fifteen millions: calling the population of our State half a million, the ratio of population would require for our State eight hundred students in the collegiate or gymnastic department now in operation. And in the University department, taking Berlin as the standard, there should be three hundred and seventy five students; or taking Bonn as the standard, two hundred students.

But the German Universities have many foreign students. At Berlin there were, I believe, during the last year, four hundred foreign students. Could the University of Michigan be developed in its proper proportions, its commanding advantages and its central and accessible position would enable it to attract students from the surrounding, and even from the more distant States. A cheap education, or an education given away, will not do it.; but only the quality of the education, and the extent of the advantages afforded. Universally, men will buy a good article, when they will not accept as a gift a poor or useless one.

There are now established only two of the Faculties in our University; the Faculty of Literature, Science and the Arts, or taking the German designation, the Faculty of Philosophy and the Faculty of Medicine.

The first, as we have shewn, is at present giving instruction only in the college or gymnasium. For this department, alone, we need a Professor of Physics and Civil Engineering, a Professor of Astronomy, a Professor of Agricultural Chemistry, a Professor of History and Political Economy, and a Professor of the English language and Literature, in addition to the professorships already existing: and still more shall we need these, in carrying out our contemplated scientific course.

We can, indeed, to some extent, combine professorships; but a proper division of labor is essential to success in education, as well as in the other forms of labor.

The Faculty of Medicine is well established; and the course of study compared with that of other medical schools is decidedly in advance of the ordinary standard. But the Faculty themselves, I well know, from their published documents, as well as from other sources, will bear me out in the assertion that it would be a most desirable improvement for this and other medical institutions to augment the requirements for admission to the full equivalent of the studies comprised either in our classical or scientific baccalaureate course.

The Law School, when established, should adopt the same rule.

It is in the power of the University of Michigan to elevate the standard of professional education.

Our Institution being a State Institution, and, therefore, connected with no particular denomination, cannot establish a Theological School on the University fund. But it is to be hoped that the different denominations will establish professorships in the different branches of theological science in this town. In some of these branches they might unite: in others they would choose to establish separate professorships.

Their students would thus enjoy the advantages of the University library, and of the lectures in the other departments. Besides, the collection of all the Faculties in one place, would be a mutual advantage, by creating a wider atmosphere of learning, and receiving the inspirations of general converse, high examples, and noble and generous competition.

It is to be hoped, too, that the Scientific and Literary Faculty, with some augmentation of its members, as above suggested, will be able, ere long to commence the higher course of University lectures.

The question here arises, "can the German Universities be accepted in full, as models for our Universities?" As literal *Cyclopædias*, supplying all the means of the higher education, *l'instruction superieure*—they undoubtedly can be thus accepted. The immense division of subjects which obtains in the German Universities may be questionable in itself, as begetting too great a comminution of ideas for a compact and orderly system. But granting that this objection is removed by the logical character of the division itself, and by the fact that the same professor lectures on several branches, so as to preserve a due relation of ideas to an organic whole in his particular department; still the present condition of our learning, unused to the German attenuation of thought, the difficulty, perhaps, of collecting at present, a sufficient number of professors for so extensive a division of labor, and the impossibility of, at once, sustaining them, the obvious necessity of a somewhat gradual development of even the most perfect system, and the fact that our immediate wants can be fully met, and a powerful stimulus given to learning, and the first sure steps taken to reach the highest order of University education, with a more limited number of professorships embracing the cardinal branches of knowledge, and filled by men of undoubted qualifications, suggest an organization more circumscribed and compact than that of Germany, or that of

France. It is mainly important that we begin on right principles and in a way to do an effective work, and leave the fecundity and ramifications of our growth to time and circumstances.

"We would suggest, therefore, the following distribution of subjects in two faculties, leaving those of the other faculties to the determination of leading minds in their respective professions:

Faculty of Philosophy and Science.

1. Systematic Philosophy; 2. History of Philosophy; 3. History and Political Economy; 4. Logic; 5. Ethics and the Evidences of Christianity; 6. The Higher Mathematics; 7. Astronomy; 8. Physics; 9. Chemistry; 10. Natural History.

Faculty of Letters and Arts.

1. Philology; 2. Greek Language and Literature; 3. Latin Language and Literature; 4. Oriental Languages; 5. Rhetoric and Criticism; 6. English Language and Literature; 7. Modern Literature; 8. The History of the Fine Arts; 9. The Arts of Design.

"These subjects might, at first, be distributed among ten or twelve Professors, aided by Lecturers selected from among distinguished men, who, without formally accepting appointments in the University, might consent to deliver courses of Lectures during particular seasons of the year."*

When the Primary Schools, and the University are properly organised and unfolded, then the way is prepared for giving the intermediate institution—the College or Gymnasium its due proportions and efficiency: for then we shall not only know where to begin, and where to end this intermediate course; but, we shall, also, be under no temptation of pressing the student with overmuch study and thus inducing superficial scholarship. The University will then be ever before him with its ample preparations, inviting him to a ripened scholarship in whatever department he may select.

---

*University Education, pp. 113, 114.

I know that the scheme proposed is on a large scale. But let no man call it visionary. Nothing is visionary that can be sustained by facts and examples. What I have laid before you is in accordance with the oldest experience in education. It is now a familiar and general fact on the Continent of Europe. It exists in France; it exists in Germany. Why may it not exist in America—why may it not exist in the State of Michigan?

It is worthy of our political institutions. Because, it is found amid monarchies and aristocracies, it is not therefore monarchical and aristocratical. Science is found there also. Protestantism is found there also. The Universities of Germany and France are the seats of liberal principles. In Germany the students and professors of the Universities have more than once been the objects of governmental persecution on account of their democratic tendencies. Do we not acknowledge that the universal diffusion of knowledge is the foundation of our hopes that our free institutions will be preserved and perpetuated? And if we demand knowledge in the lower degrees, do we fear it in the higher? Is it our doctrine that perfected knowledge prepares mankind for despotism? Is it not rather our doctrine, that a free people cannot know too much, and that the more we know, the more strongly shall we lay hold upon freedom? The clearer, the more perfect the element of light, the better we shall see.

This University belongs to the people. Their votes elect the Regents who have the supervision over all its interests and movements. Its advantages are freely thrown open to the people. The son of the poorest man can enter here as freely and independently, as the richest. Education levels all artificial distinctions, and creates only that aristocracy which all men acknowledge, and which the God of the universe sanctions, the aristocracy of intellectual and moral worth. It creates such aristocrats as Clay, Webster, Cass and Pierce, men of the Constitution, men of the people, the glorious dead! the honored living!

But, it is often said, we are a young people, the nations of Europe are old: the European Universities are the growth of centuries. In opposition to this I would state that the most eminent Universities of Germany are of modern growth.—The University of Berlin, for example, was founded in 1810, and in 1826 when it was scarcely older than the University of Michigan is now, it contained sixteen hundred and forty-two matriculated students. I know the wide difference between an old and a new State as to the resources which foster such an institution; but, nevertheless, it proves that a great University may be of rapid growth.

Let me remind you, too, that it is not in accordance with the spirit of our country to let improvements grow slowly. This great State is the growth of a quarter of a century.—In our industrial arts and improvements we are not willing to fall behind Europe according to the ratio of our respective ages. We aim not merely to equal, but even to surpass the old nations of the world, in our manufactures, our steamboats, and our railroads. We level the forest in a day, lay down our tracks, and startle the old world with the sound of our engines. Our steamers outspeed their's across the ocean. Our yachts win the royal prize over the ancient ship builders in the sight of the Majesty of England. The Autocrat of Russia employs our engineers to make his railroads; and his steamers are built on our shores.

Shall we be behind then only in the great matter of Education? Can we not build up Universities too? Shall we apply to the cultivation of Mind a principle of slow progession which we scorn to apply to anything else? Let it not be my countrymen—let it not be. Arouse thy energies young State of Michigan! Giant of the West! holding the great lakes in the hollow of thine hands; bearing on thy bosom, deep engraven, the memorials of thy glorious deeds; looking with eyes of light upon all thy brothers around thee, and inspiring them with thy majesty and beauty; speak out with thy strong and melodious voice the decree that here a new Athens shall arise with its schools of Philosophy and Art, and its Acropolis crowned with another Parthenon, more glorious than that of old, because, illumined with the true light from heaven!

UNIVERSITY OF CALIFORNIA LIBRARY
BERKELEY

Return to desk from which borrowed.
This book is DUE on the last date stamped below.

MAR 20 1948
14Dec'48
Ma 7 19R
5Feb'53HH
5 Ma
FEB 5 1954 LU
NOV 20 1969 8 7
REC'D LD JAN 3-'70-2PM
OCT 25 1991
AUTO DISC MAY 10 '91

LD 21-100m-9,'47(A5702s16)476

U.C. BERKELEY LIBRARIES
C031968527

M223898
LD3295
1852
THE UNIVERSITY OF CALIFORNIA LIBRARY